

Application No.: 09/938,672

Docket No.: M4065.0475/P475

AMENDMENT TO THE SPECIFICATION

At page 3, please replace paragraph [0007] with the following:

[0007] Fig. 1 shows a substrate 11 having a doped well over which the memory cells are formed. The substrate can be formed of any semiconductor material with silicon being exemplary. The substrate 11 has fabricated thereon a plurality of gate stacks, two of which (13b and 13c) are part of MOSFET access transistors 15a and 15b for lower memory cells of the stacked pairs of cells. Transistors 15a and 15b have associated source/drain doped regions 17a, 17b, and 17c. The gate stacks each contain an oxide layer, e.g. a silicon oxide layer 21, in contact with substrate 11, a conductor layer 23 formed of, for example, polysilicon, a conductive silicon layer 25 and a cap insulating layer 27 formed of, for example, silicon nitride. Insulating sidewall ~~spaces~~ spacers 29 of, for example, silicon nitride are also provided. The material composition of the various layers and sidewalls of the gate stacks is not critical as other well known materials used to form the components of a transistor gate stack may also be used.

At page 6, please replace paragraph [0013] with the following:

[0013] The specific binary values stored within the memory cells 118, 120 of the present invention is determined by respective sense amplifiers 159, 180. As shown in Fig. 7, the PCRAM system of the present invention locates those sense amplifiers 159 and 180 in the periphery of the memory array of the present invention. Using memory cell 118 as an example, a sense amplifier 159 has one input tied to the common anode 110, and the other input tied to the access transistor 118_{AT} device through a column line A through a transistor 150. The access transistor 118_{AT} is connected to a wordline and allows charge to move from the memory cell 118 to the sense amplifier 159 when both row and columns associated with cells 118, 120 are selected, and the lower cell 118 is selected. As an alternative to being tied to common anode 110, the input 158 of sense amplifier 159 can instead be tied to a reference signal which may be another inactive column line.